log were three other species of ants, but none of these was nesting in contact with *nitidiventris*. The ants which were found here were: *Camponotus castaneus* Latr., *Lasius umbratus mixtus* var. *aphidicola* Walsh, and *Aphaenogaster lamellidens* var. *nigripes* M. R. Smith.

106.—Formica rufa obscuripes var. melanotica Emery.

A. and M. College. Last spring (1927) one of the students brought to the laboratory a small worker of what I believe to be this species. When questioned as to where he had collected it, the student stated that he took the specimen in the edge of a patch of woods near the college. At my request he later went back to hunt for more specimens but was unable to find any.

New Bees From the Miami Region of Florida (Hymen.: Andrenidae, Megachilidae).

By S. Graenicher, South Miami, Florida.

Triepeolus rufithorax n. sp.

♀ Length about 10.5 mm. Head and abdomen black, thorax dark red with the exception of a greater portion of the metathorax, which is mostly black.

Punctures on lower sides of face very delicate and close, coarser above the antennae. Vertex shining, coarsely punctured. Mandibles red with dark tips. Labrum, clypeus, supraclypeal area and first three joints of antennae red. Clypeus minutely sculptured with scattered punctures, and a median low smooth and shining ridge above. Supraclypeal area distinctly punctured, produced into a narrow black-tipped ridge between the antennae. Sericeous pubescence on middle portion of face.

Golden ornaments distributed as follows: band on pronotum, attenuated towards the middle and slightly interrupted; a semicircular patch back of tubercle; a small patch behind the tegula; two parallel narrow bands below the scutellum, running into a tuft of long hairs on each side; a comma-shaped, oblique band on each side of posterior face of the propodeum; two indistinct short longitudinal lines on the mesonotum in front; a short, hardly visible line on the mesopleura. Mesonotum finely roughened, the same as the sulcate scutellum with its conical blunt tooth on each side. Mesopleurae more coarsely sculptured than mesonotum. Tegulae reddish testaceous, smooth and shin-

ing. Wings dark, especially their outer margins. Nervures and stigma black. Legs entirely red, including the tibial spurs. Claws dark.

Bands on abdominal segments 1 to 3 golden yellow. Apical band on first segment narrow and interrupted, widened considerably along the sides. Bands on second and third segments slightly interrupted, widened toward the margins, that on fourth entire and more cinereous. Fifth with a triangular cinereous patch on each side, its middle portion striato-punctate, slightly shining, and its apex truncate. The first ventral segment reddish on its posterior half, with a distinct median triangular pit near the apical margin. Ventral segments 2 to 4 finely punctured, shining, with a reddish tinge near their apices. Segment 5 rounded and its apex turned downward to a slight extent.

♂. Agrees very closely with the female. More pubescence on the face below and around the antennae. Ornaments lighter, more cinereous. Bands on the third to sixth abdominal segments distinctly cinereous. Apical plate narrowed considerably towards the rounded tip, and surrounded by a black ridge. A cinereous band on apex of ventral segment 2, ventral segment 3 entirely covered with cinereous hairs.

Type: ♀, Miami, July 16, 1927. Allotype: ♂, South Miami, July 22, 1924. Of the 24 paratypes, 18 were collected by the author at Miami and South Miami, and the following 6 are in the collection of the American Museum of Natural History of New York. The labels on these give the following information: 1 ♀, F. 4666 B, Miami, Fla., April 11-21, 1923; 1 ♀ F. 4667, Royal Palm State Park, Fla., April 12-18, 1923; 2 ♀ ♀, F. 4671S, Royal Palm State Park, Fla., April 12-18, 1923; 2 ♀ ♀, F. 4675A, Miami, Fla., April 11-21, 1923.

Three of these were captured at Royal Palm State Park, about 44 miles southwest of Miami, and these records establish a more southern range than my specimens indicate. For the loan of this material for study, I am greatly indebted to the Entomological Department of the American Museum of Natural History of New York, and in addition I wish to thank Mr. Herbert F. Schwartz, a member of that Department, through whose kind efforts I obtained the loan.

This species varies in length from about 9 mm. to 10.5 mm. There is also some variation in color; the red extends in some individuals to the first abdominal segment, and in two (♂ and ♀) even to the second.

The most conspicuous character of this species is the predominant red color of the thorax. The following parts are also red: mandibles, labrum, antennae at base, large portion of face, and legs except the claws. The yellow hairy ornaments of the thorax and abdomen show in fresh specimens a golden tinge. This combination of characters separates the species from any species of our fauna described so far.

Males have been collected from March 31 to June 22. The females are on the wing throughout the warmer season, from about March 28 to October 26. They were visiting the flowers of the following species: *Vernonia Blodgettii, Bidens leucantha; Melanthera radiata, M. parviflora, Flaveria linearis, Borrichia frutescens, Sida carpinifolia, Poinsetta cyathophora* and *Sabal palmetto* *. The first six mentioned belong to the Compositae.

Heriades crawfordi n. sp.

♀ Length about 7.5 mm. Face distinctly longer than broad, clothed with sparse white pubescence, which is short in the middle, longer on the sides next to the antennae. Punctures small and very close on the clypeus, coarser on vertex and occiput. A very narrow, low, shining ridge on upper middle of clypeus. Lower margin of clypeus straight. Mandibles broad, ending in a strong, pointed tooth. Antennae black.

Mesonotum closely punctured in front, more coarsely and sparsely towards the scutellum. Scutellum flat and shining, with few strong punctures. Pleurae more coarsely sculptured than mesonotum. Disk of propodeum with a transverse row of deep pits, bounded by a posterior high ridge. Posterior face with moderately deep punctures laterally, and a median smooth and shining sulcus, which broadens out above. Wings dusky on outer half. Tegulae, nervures and stigma black. Legs black, with testaceous claws, and long whitish hairs on posterior basitarsi.

Abdomen with clean-cut white apical hairbands on segments 1 to 5. Punctures small and close on segments 1 and 2, stronger and more separated on segment 3, and gradually becoming finer on remaining segments. Concavity on base of first segment shallow, bounded by a distinct narrow rim. Surface of concavity shining, with punctures in upper half, and a short sulcus below. Ventral scopa white.

♂ Length about 6.5 mm. Face narrower, body, and especially face, more hairy, and punctures in general finer and closer than in opposite sex. Second antennal joint about as long as broad, third shorter.

* Nomenclature according to Small's "Flora of Miami" or the same author's "Flora of the Southeastern United States."

Apical portion of abdomen bent downward and forward from third or fourth segment on. Sixth segment with a truncate apical margin, and a preapical depression on each side. First ventral segment produced considerably towards the middle of its apex. It forms a blunt projection covering the base of the second segment. The apical margin of the latter is slightly membranous in the middle. Segments 3 and 4 are thin and membranous to a greater extent. Segment 5 is split, forming 2 rounded membranous lobes. Membranous parts testaceous.

Described from 3 males and 12 females taken at South Miami, Miami and Hollywood, on the flowers of *Croton linearis*, *Pterocaulon undatum* and *Chrysopsis Tracyi*. According to the records on hand, this bee flies during the cooler months, from about the end of October to the middle of April.

Type: ♀, South Miami, November 12, 1924. Allotype: ♂, Miami, December 4, 1924.

Large for a *Heriades*. The structures of the ventral segments in the male are very characteristic of the species. The ♂ of this species has the first ventral abdominal segment elongate medially, and agrees in this respect with *H. leavitti* Crawford, Can. Ent. 45, 270 (1913). In *H. leavitti* this elongation is pointed at the apex, according to the description, in *H. crawfordi* it is rounded. There is a distinct difference between the two in the puncturation of the dorsum of the abdomen. On the first 3 segments of *H. leavitti* the punctures are fine and close, "hardly half a puncture width apart". In *H. crawfordi* segment 2 has very close and fine punctures, on segment 1 the punctures are close but distinctly coarser, and on segment 3 coarse and mostly the entire width of a puncture apart.

H. leavitti is a smaller insect than *H. crawfordi*. The ♀ of the former has not been described.

The ♂ of *H. carinatus* Cresson, Proc. Ent. Soc. Phil. 2, 383, (1864) has the apex of the first ventral abdominal segment truncate, not elongate and a blunt tubercle on its disk. This separates it from either *H. crawfordi* or *H. leavitti*.

Stelis floridana n. sp.

♀ Length about 10 mm. Ground color black. Ornaments partly yellow, mostly red. Legs red. Head covered with short white hairs, especially around the antennae. Clypeus dull, closely and finely punctured. Rest of head shining with coarse

punctures. A broad band on side of face yellowish on lower half, reddish above. A transverse red band behind the eyes. Antennae black, lighter on flagellum beneath.

Punctures on mesonotum distinct and crowded, coarser and more separated on scutellum and sides of thorax. Tufts of white hair beneath tegulae and wings. A red band on each side of mesonotum, curving forward, and becoming yellowish, broadly interrupted on the front margin. Scutellum red, broadly rounded on sides, and slightly truncate at apex. Axillae red with punctures smaller than on scutellum. Tubercles red, shining, finely punctured. Tegulae red and shining, with fine punctures, and a faint dark annulus on top. Upper anterior corner of mesopleura red as far as middle of tegula and half way down. Spot under hind wing and a smaller one in lower hind corner of mesopleura red. Wings sooty, darker along the outer two-thirds of the front margin. Stigma brown, veins black. Middle femora broader than the other ones. Legs red, including tibial spurs and claws. Hind coxa large and flat, blackish on the outer surface.

Abdomen shining, coarsely puntured on second segment, finer on basal and third segments, and gradually becoming finer and closer towards the sixth. A narrow, smooth apical space on segments 1 to 5. First segment red, black at base; second with a red scarcely interrupted band, narrowed medially. Third with a subapical yellow band, narrow and emarginate in the middle. Subapical yellow band on the fourth, with lateral indentations and a median emargination. Fifth with a short emarginate yellow band, about one-third as broad as the segment. Sixth entirely black. Much red on the first ventral segment, and a faint indication of the same color along the apices of ventral segments 2 to 5. Sixth black, flat and rounded at tip.

♂ Length about 9 mm. Very much like the female, but ornaments differing as follows: red triangular mark on basal two-thirds of clypeus. Band on second abdominal segment more narrowed medially, that on third reddish, broadened on sides. Fourth with reddish ornaments, consisting of a short narrow median band, widely separated from a triangular spot on each extreme side. Remaining segments black. Apex of sixth segment truncate with a semicircular emargination. Seventh with an apical tooth. The first five dorsal segments are turned inward on the sides, thereby overlapping the ventral segments. First ventral about one-half as broad as the abdomen, coarsely punctured at base, and shining on apical half with a hyaline apical margin. Second shining with coarse punctures, and a red smooth apex, which is turned upward, and considerably produced over the third. The latter split in the middle, forming two round, membranous lobes. Fourth black and punctured at

base, ending in two very thin projecting membranes. Fifth flat, not membranous, incised in middle. Sixth black and shining, slightly rounded at apex, and with a median longitudinal furrow.

Described from 1 female and 4 males taken at Homestead (about 23 miles southwest of Miami) July 21, 1916. I have not come across it since.

Type: ♀, Homestead, Dade County, Fla., July 21, 1916. Allotype: ♂, Homestead, Dade County, Fla., July 21, 1916.

Its nearest relative is *S. costalis* Cresson (Texas), from which it differs in color, shape and distribution of its ornaments. Mr. J. C. Crawford, to whom I sent a ♂ specimen, compared it with specimens of ♂ *costalis* in his collection, and wrote to me, among other things, that he had never seen a *costalis* as big as the specimen (of *floridana*) sent to him, nor one with the marks red.

I take this opportuity to thank Mr. Crawford for the valuable information received from him lately, as also in previous years.

Personals.

M. P. Lesne, the well known Coleopterist, was elected an honorary member of the Entomological Society of France, December 14, 1927.

Dr. M. T. Smulyan is working on a revision of the genus *Perilampus* (Chalcidae) in No. America.

Prof. T. V. Ramakrishna Ayyar, the Indian Entomologist, has just returned from his world tour after visiting America, England, and the Continent, as announced in the NEWS for February, 1927. In America he spent about eight months at the Stanford University as a graduate research scholar. That University conferred on him the degree of Ph. D., in recognition of his past work in Zoology and Entomology in India and for a thesis on "A contribution to our knowledge of the Thysanoptera of India". Before leaving the States Dr. Ayyar visited a few Entomological Institutions including the U. S. National Museum. He then crossed over to Europe and after spending some time in the British Museum and other places of scientific interest returned to India after a short ramble on the Continent.

Dr. Ayyar with his 30 years' work at Entomology and his recent personal experiences with many eminent Entomologists